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EXAMINER	
LEVI, DAMEON E	
ART UNIT	**PAPER NUMBER**
2841	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	**Application No.** 10/681,841	**Applicant(s)** DOBBS ET AL.	
	Examiner Dameon E Levi	**Art Unit** 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-35* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-35* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *08 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11, 14-18,21,22,29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailis et al US Patent 6373712.

Regarding claim 1, Bailis et al discloses an assembly comprising:

a card guide that comprises a plurality of card guide portions(for example, see elements 28, 30,Figs 1-5E) that serve to guide a circuit board into a chassis, wherein the plurality of card guide portions comprise a first card guide portion(for example, see elements H" ,Figs 1-5E) and a second card guide portion(for example, see elements S,Figs 1-5E) , wherein the first card guide portion serves to guide the circuit board substantially along a first direction during engagement of the circuit board with the first card guide portion, wherein the second card guide portion serves to guide the circuit board substantially along a second direction that is nonlinear with the first direction during engagement of the circuit board with the second card guide portion(for example, see,Figs 1-5E).Moreover, the claim recitation(wherein the card guide portions serve to guide...) is deemed functional in nature by the Office However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 2, Bailis et al discloses wherein the first card guide portion serves to guide the circuit board towards the second card guide portion(for example, see elements 28, 30,Figs 1-5E). Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 3, Bailis et al discloses wherein the second card guide portion serves to guide the circuit board to an engagement of a first connector component of the circuit board with a second connection component of the chassis(for example, see elements 28, 30,Figs 1-5E). Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 4, Bailis et al discloses wherein the first connector component comprises a first electrical connector of the circuit board(for example, see elements 60, Figs 1-5E), wherein the second connector component comprises a backplane(for example, see elements 56,58,Figs 1-5E), wherein the second card guide portion serves to guide the circuit board towards the backplane to electrically couple the first electrical connector with the backplane. Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 5, Bailis et al discloses wherein the first direction is oblique relative to the second direction(for example, see elements H",S, Figs 1-5E).

Regarding claim 6, Bailis et al discloses wherein the second card guide portion serves to guide the circuit board in the second direction to align a first connector component of the circuit board with a second connection component of a backplane in the chassis(for example, see elements 56,58,60, H' S, Figs 1-5E). Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 7, Bailis et al discloses wherein the first card guide portion serves to guide the circuit board in the first direction to prevent contact between the circuit board and the chassis(for example, see elements 56,58,60, H' S, Figs 1-5E). Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 8, Bailis et al discloses wherein the first card guide portion serves to guide the circuit board in the first direction to avoid an obstacle in a circuit board entrance of the chassis(for example, see elements 56,58,60, H' S, Figs 1-5E). Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 9, Bailis et al discloses wherein the first card guide portion and the second card guide portion promote a clearance by the circuit board of an obstacle in a circuit board entrance of the chassis(for example, see elements 56,58,60, H' S, Figs 1-5E).

Regarding claim 10, Bailis et al discloses wherein the chassis comprises a lip, wherein behind the lip is an open space in the chassis(for example, see elements 42,60, H' S, Figs 1-5E), wherein the first card guide portion serves to guide the circuit board in the first direction around the lip and into the open space to fill the open space with a portion of circuit board. Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 11, Bailis et al discloses wherein the second card guide portion supports the circuit board during an engagement of a connection component of the circuit board with a connection component of the chassis(for example, see elements 42,60, H' S, Figs 1-5E).

Regarding claim 14, Bailis et al discloses wherein the card guide comprises an installation path for the circuit board into the chassis, wherein the card guide comprises a bend in the installation path(for example, see elements 28,30, H' S, Figs 1-5E).

Regarding claim 15, Bailis et al discloses wherein during installation of the circuit board into the chassis, the circuit board slides along the first card guide portion in the installation path, through the bend in the installation path, and along the second card guide portion in the installation path (for example, see elements 42,60, H' S, Figs 1-5E).

Regarding claim 16, Bailis et al discloses wherein the bend is between the first card guide portion and the second card guide portion, wherein the bend creates an angle between the first direction and the second direction(for example, see elements H' S, Figs 1-5E).

Regarding claim 17, Bailis et al discloses wherein the second card guide portion serves to align a first connector component of the circuit board with a second connection component of a backplane in the chassis(for example, see elements 56,58,60, H' S, Figs 1-5E). wherein the angle is based on a size of an obstacle in the chassis and a size of the circuit board, wherein the angle is set so that upon installation of the circuit board with the chassis, the circuit board is free to pass around the obstacle(for example, see elements 56,58,60, H' S, Figs 1-5E).

Regarding claim 18, Bailis et al discloses wherein the card guide comprises a groove, wherein the groove runs through the first card guide portion and the second card guide portion(for example, see elements 28,30, H' S, Figs 1-5E); wherein the groove serves to guide the circuit board through the first card guide portion and the second card guide portion(for example, see elements 60, H' S, Figs 1-5E). Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 21, Bailis et al discloses wherein the card guide comprises an installation path for the circuit board into the chassis, wherein the card guide comprises a plurality of bends in the installation path(for example, see elements 28,30, H' H",S, Figs 1-5E);wherein the plurality of bends serve to guide the circuit board substantially along a plurality of non-linear directions during installation of the circuit board into the chassis. Moreover, the claim recitation (wherein the plurality of bends serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 22, Bailis et al discloses wherein the card guide comprises an installation path for the circuit board into the chassis, wherein the card guide comprises one or more curves in the installation path(for example, see elements 28, H' H",S, Figs 1-5E); wherein the first card guide portion comprises a first portion of a curve of the one or more curves and the second card guide portion comprises a second portion of the curve(for example, see elements 30, H' H",S, Figs 1-5E); wherein the first portion of the curve serves to guide the circuit board substantially along the first direction during engagement of the circuit board with the first portion of the curve; wherein the second portion of the curve serves to guide the circuit board substantially along the second direction during engagement of the circuit board with the second portion of the curve. Moreover, the claim recitation (wherein the card guide portions serve to guide...) is deemed functional in nature by the Office. However, the prior art of record is deemed by the Office as anticipating such functionality.

Regarding claim 29, Bailis et al discloses an apparatus, comprising:

means for guiding a circuit board substantially along a first direction during engagement of the circuit board with the means for guiding the circuit board substantially along the first direction(for example, see elements 30, S, Figs 1-5E);; and means for guiding the circuit board substantially along a second direction that is nonlinear with the first direction during engagement of the circuit board with the means for guiding the circuit board substantially along the second direction; (for example, see elements 30, H" Figs 1-5E); wherein the means for guiding the circuit board substantially along the second direction serves to guide the circuit board to an engagement with a chassis.

Regarding claim 30,Bailis et al discloses wherein the means for guiding the circuit board

substantially along the first direction serves to guide the circuit board towards the means for guiding the circuit board substantially along the second direction (for example, see elements 28, 30,Figs 1-5E).

Regarding claim 31, Bailis et al discloses wherein the means for guiding the circuit board substantially along the first direction serves to guide the circuit board around an obstacle in the chassis to prevent contact between the circuit board and the obstacle(for example, see elements 30,60,42,S, H" Figs 1-5E).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12,13,19,20,32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailis et al US Patent 6373712 in view of Mansueto US Patent 6619766.

Regarding claim 12, Bailis et al discloses the instant claimed invention except wherein the circuit board comprises one or more card guide pins on a side of the circuit board; wherein during installation of the circuit board into the chassis, the card guide serves to guide the circuit board into the chassis through support of one or more of the one or more card guide pins on the side of the circuit board.

Mansueto discloses an assembly wherein a circuit board comprises one or more card guide pins on a side of the circuit board(for example, see elements 102,120,202,204,206,208 Figs 1-9); wherein during installation of the circuit board into a chassis, the card guide serves to guide the circuit board into the chassis through support of one or more of the one or more card guide pins on the side of the circuit board(for example, see elements 102,120,110 Figs 1-9)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided card guide pins as taught by Mansueto in the assembly as taught by Bailis et al in order to allow the circuit board to slide along a guide channel formed on the chassis(See Mansueto column 3, lines 10-35)

Regarding claim 13, Bailis et al discloses the instant claimed invention except wherein the circuit board comprises one or more first card guide pins on a first side of the circuit board and one or more second card guide pins on a second side of the circuit board; wherein the card guide comprises a first card guide on the first side of the circuit board and a second card guide on the second side of the circuit board; wherein the first card guide supports one or more of the one or more first card guide pins on the first side of the circuit board, wherein the second card guide supports one or more of the one or more second card guide pins on the second side of the circuit board.

Mansueto discloses an assembly wherein a circuit board comprises one or more first card guide pins on a first side of the circuit board (for example, see elements 102,120, Figs 1-9) and one or more second card guide pins on a second side of the circuit board(for example, see elements 102,120, Figs 1-9); wherein the card guide comprises a first card guide on the first side of the circuit board and a second card guide on the second side of the circuit board(for example, see elements 102,220 Figs 1-9); wherein the first card guide supports one or more of the one or more first card guide pins on the first side of the circuit board(for example, see elements 102,120,220, Figs 1-9) , wherein the second card guide supports one or more of the one or more second card guide pins on the second side of the circuit board(for example, see elements 102,120,220, Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the first and second card guide pins, as well as, the first and second card guides as taught by Mansueto in the assembly as taught by Bailis et al in order to allow the circuit board to slide along a guide channel formed on the chassis(See Mansueto column 3, lines 10-35).

Regarding claim 19, Bailis et al discloses the instant claimed invention except wherein the circuit board comprises one or more card guide pins, wherein one or more of the one or more card guide pins engage with the groove to couple the circuit board with the card guide.

Mansueto discloses an assembly wherein a circuit board comprises one or more card guide pins(for example, see elements 102,120, Figs 1-9) wherein one or more of the one or more card guide pins engage with the grove to couple the circuit board with the card guide(for example, see Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the card guide pins as taught by Mansueto in the assembly as taught by Bailis et al in order to allow the circuit board to slide along a guide channel formed on the chassis(See Mansueto column 3, lines 10-35).

Regarding claim 20, Bailis et al discloses the instant claimed invention except wherein the circuit board comprises one or more card guide pins, wherein one or more of the one or more card guide pins slide in the grove to couple the circuit board with the card guide.

Mansueto discloses an assembly wherein a circuit board comprises one or more card guide pins(for example, see elements 102,120, Figs 1-9) wherein one or more of the one or more card guide pins slide in the grove to couple the circuit board with the card guide(for example, see Figs 1-9).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the card guide pins as taught by Mansueto in the assembly as taught by Bailis et al in order to allow the circuit board to slide along a guide channel formed on the chassis(See Mansueto column 3, lines 10-35).

Regarding claim 32, Bailis et al discloses the instant claimed invention except further comprising means for coupling the circuit board with the means for guiding the circuit board substantially along the first direction and the means for guiding the circuit board substantially along the second direction;

Mansueto discloses an assembly comprising means for coupling the circuit board with the means for guiding the circuit board substantially along the first direction and the means for guiding the circuit board substantially along the second direction; (for example, see elements 102,120,202,204,206,208 Figs 1-9); wherein the means for coupling the circuit board slide through the means for guiding the circuit board substantially along the first direction and the means for guiding the circuit board substantially along the second direction to the engagement with the chassis (for example, see elements 102,120,110 Figs 1-9)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the means for guiding the circuit board substantially along the first and second directions as taught by Bailis et al in order to allow the circuit board to slide along a guide channel formed on the chassis(See Mansueto column 3, lines 10-35)

Regarding claims 33-35, the methods disclosed therein are deemed as inherent in the assembly and operation of the claimed apparatus of the preceding claims as fully met by the accompanying references, (Mansueto, Bailis et al) and are subsequently rejected. The prior art of record teaches or suggests the elements of the claimed assembly and hence, the methods as claimed are deemed as inherent by the Office.

Claims 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mansueto US Patent 6619766 in view of Bailis et al US Patent 6373712.

Regarding claim 23, Mansueto discloses an apparatus, comprising:

a circuit board that comprises one or more card guide pins; (for example, see elements 102,120, Figs 1-9)

Mansueto does not expressly disclose wherein one or more of the one or more card guide pins slide through one or more bends in a card guide of a chassis to guide the circuit board around an obstacle in the chassis.

Bailis et al discloses an apparatus comprising one or more bends in a card guide of a chassis(for example, see elements 30, H' H",S, Figs 1-5E)

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a card guide as taught by Bailis et al along with the circuit board as taught by Mansueto in order to allow the circuit board to slide along a guide channel formed on the chassis (See Mansueto column 3, lines 10-35).

Regarding claim 24, Mansueto discloses wherein one or more of the one or more card guide pins protrude from one or more sides of the circuit board(for example, see elements 102,120, Figs 1-9); wherein the one or more of the one or more card guide pins that protrude from the one or more sides of the circuit board engage with the card guide to support the circuit board(for example, see elements 102,120,112 Figs 1-9).

Regarding claim 25, Mansueto discloses the instant claimed invention except one or more bends in the card guide.

Bailis et al discloses a card guide comprising one or more bends (for example, see elements 30, H' H", S, Figs 1-5E).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a card guide as taught by Bailis et al in the apparatus as taught by Mansueto in order to allow the circuit board to slide along a card guide channel formed on the chassis.

Regarding claim 26, the claim suggests intended use of the claimed elements. However, it would have been obvious that one skilled in the art, given the circuit board comprising the guide pins as taught by Mansueto and the card guides comprising the first and second bends as taught by Bailis et al would slide the circuit board into the chassis by engaging the guide pins with the card guide to allow the circuit board to slide along the card guide into the chassis (See Mansueto column 3, lines 10-35) in order to achieve the claimed functionality.

Regarding claim 27, the claim suggests intended use of the claimed elements. However, it would have been obvious that one skilled in the art, given the circuit board comprising the guide pins, as well as, the connector components on the chassis and the circuit board as taught by Mansueto, and, the card guides comprising the first and second bends as taught by Bailis et al would slide the circuit board into the chassis by engaging the guide pins with the card guide to allow the circuit board to slide along the card guide into the chassis (See Mansueto column 3, lines 10-35) in order to achieve the claimed functionality.

Regarding claim 28, Mansueto discloses the instant claimed invention except wherein the card guide comprises a bend of the one or more bends to provide an installation path around the obstacle in the chassis for the circuit board;

wherein the one or more of the one or more card guide pins slide past the bend in the card guide to prevent contact between the circuit board and the obstacle in the chassis during installation of the circuit board into the chassis.

Bailis et al discloses wherein a card guide comprises one or more bends(for example, see elements 30, H' H", S, Figs 1-5E).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a card guide as taught by Bailis et al in the apparatus as taught by Mansueto in order to allow the circuit board to slide along a card guide channel formed on the chassis.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dameon E Levi whose telephone number is (571) 272-2105. The examiner can normally be reached on Mon.-Fri. (9:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dameon E Levi
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DEL

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